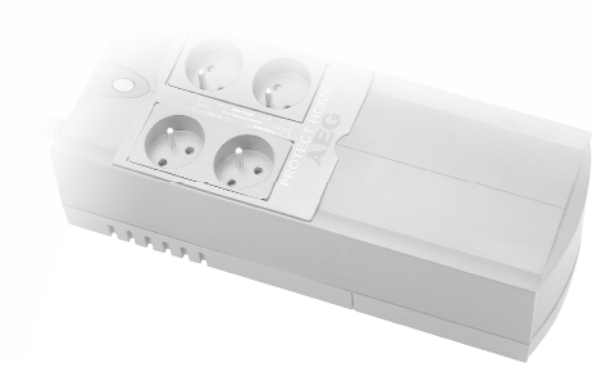
AEG

PROTECT HOME.



Thank you for purchasing the AEG UPS PROTECT HOME. from AEG Power Solutions.

Safety information and operating instructions are included in this manual. To ensure correct use of the UPS, please read this manual thoroughly before operating it. Save this manual properly.

1 Notes on these Operating Instructions

Duty to Provide Information

These operating instructions will help you to install and operate the Uninterruptible Power Supply (UPS) PROTECT HOME., safely and properly, and for its intended purpose. These operating instructions contain important information necessary to avoid dangers during operation.

Please read these instructions carefully prior to commissioning!

These operating instructions are a composite part of PROTECT HOME. The operator of this unit is obliged to communicate these instructions to all personnel transporting or starting PROTECT HOME. or performing maintenance or any other work on the unit.

Validity

These operating instructions comply with the current technical specifications of PROTECT HOME. at the time of publication. The contents do not constitute a subject matter of the contract, but serve for information purposes only.

Warranty and Liability

We reserve the right to alter any specifications given in these operating instructions, especially with regard to technical data and operation.

Claims in connection with supplied goods must be submitted within eight days of receipt, along with the packing slip. Subsequent claims cannot be considered.

The warranty does not apply for damage caused by non-compliance with these instructions (such damage also includes damaging the "Q.A." warranty seal). AEG will accept no liability for consequential damage. AEG will rescind all obligations such as warranty agreements, service contracts,

etc. entered into by AEG and its representatives without prior notification in the event of maintenance and repair work being carried out with anything other than original AEG spare parts or spare parts purchased by AEG.

Handling

PROTECT HOME. is designed and constructed so that all necessary steps for start-up and operation can be performed without any internal manipulation of the unit. Maintenance and repair work may only be performed by trained and qualified personnel.

Hotline

If you still have questions after having read these operating instructions, please contact your dealer or our "Hotline":

Phone: +49 (0)180 5 234 787

Fax: +49 (0)180 5 234 789

Internet: www.AEGppartnernet.com

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1.1 Certification

AEG

Power Solutions

Declaration of Conformity

Document - No. CE 0066

We

AEG Power Solutions GmbH
Emil – Siepmann – Straße 32, D – 59581 Warstein

declare under our sole responsibility that the product

Uninterruptible Power Supply (UPS)
Protect home.
type power 600VA

to which this declaration relates is in conformity with the following standards or other normative documents

EN 62040-1-1:2003
EN 50091-2:1995 clause 2.4/2.5 class A
EN 61000-3-2:1995
EN 61000-3-3:1995

Following the provisions of directives

89 / 336 / EEC	**EMC Directive**
73 / 23 / EEC	**Low Voltage Directive**
93 / 68 / EEC	**Marking Directive**

Year of labelling the CE – Mark: 2006

Germany, 59581 Warstein, 03.12.2008

AEG Power Solutions GmbH
Quality Management

.....
(Filmar)

AEG Power Solutions GmbH
Product Management
Compact UPS

.....
(Schneider)

2 Safety

2.1 Important Safety Instructions

Read these operating instructions carefully prior to commissioning of the PROTECT HOME. UPS and observe the safety instructions!

Only use the unit if it is in a technically perfect condition and always in accordance with its intended purpose, while being aware of safety and danger aspects, and in accordance with the operating instructions! Immediately eliminate any faults which could be detrimental to safety.

The following pictograms are used in these operating instructions to identify dangers and important information:

Danger!

Identifies risk of fatal injury to the operator.

Warning!

Identifies risk of injury and risk of damage to the unit and parts of the unit.

Information!

Useful and important hints for the operation of the UPS.

2.2 Safety Instructions for PROTECT HOME.

This chapter contains important instructions for the UPS PROTECT HOME. These must be followed during assembly, operation and maintenance of the uninterruptible power supply and the batteries.

The UPS carries high voltage. Danger! **The unit may only be opened by trained and qualified personnel**. Repairs may only be carried out by qualified customer service staff!

The output may be live, even if the UPS is not connected to the mains supply, as the UPS has its own internal power supply (battery)!

For health and safety reasons, the unit must be earthed correctly!

PROTECT HOME. may only be operated with or connected to a 230 VAC mains with protective grounding using a mains connection cable with PE conductor (included in the delivery) that has been tested in accordance with German standards (VDE).

Danger! Risk of burning!

The battery has **powerful short-circuit currents**. Incorrect connection or isolation faults can lead to melting of the plug connections, sparking potential and **severe burns**!

The unit has a warning signal that sounds when the battery voltage of PROTECT HOME. is exhausted or when the UPS is not working in its normal mode.

Observe the following safety instructions to ensure permanent operational safety of and safe work with the UPS:

- Do not dismantle the UPS!
  (The UPS does not contain any parts which require regular maintenance. Bear in mind that the warranty will be invalidated if the unit is opened!)
- Do not install the unit in direct sunshine or in close proximity of heaters!
- The unit is designed to be installed inside in heated rooms. Never install the UPS in the vicinity of water or in an excessively damp environment!
- Condensation may occur if the UPS is brought from a cold environment into the room where it is to be installed. The UPS must be absolutely dry prior to start-up. As a result, leave it to acclimatise for at least two hours.
- Never connect the mains input to the UPS output!

- Ensure that no fluids or foreign bodies can penetrate the UPS!
- Do not block the side air vents of the unit! Keep children away from the unit and ensure that objects are never inserted through the vents!
- Do not connect household appliances such as hairdryers to the UPS!
- The mains connection should be near the unit and easily accessible to facilitate disconnecting the AC input or pulling out the plug!
- During operation, do not disconnect the mains connection cable from the UPS or from the socket outlet in the building (shockproof socket), otherwise the protective grounding of the UPS and all the loads connected to it will be cancelled.

Danger! Electric shocks!

Even after the mains voltage has been disconnected, the components within the UPS remain connected to the battery and can thus cause electric shocks. It is therefore imperative to disconnect the battery circuit before carrying out any maintenance or repair work!

If it is necessary to replace the battery or carry out maintenance work, this must be done by or under the supervision of a person familiar with batteries and the necessary safety precautions!

Only authorised persons are allowed in the vicinity of the batteries!

When replacing the battery, the following must be observed: Only ever use identical maintenance-free sealed lead batteries with the same data as the original battery.

Danger! Explosive!

Never throw batteries into open fire. Never open or damage batteries. Electrolyte may leak out and damage skin and eyes. It may be toxic!

Batteries can cause electric shocks and high short-circuit currents.

Therefore, take the following safety precautions when working with batteries:

- Take off watches, rings and other metallic objects!
- Always use tools with insulated handles!

For personal safety reasons, never switch on the main switch when the mains connector of PROTECT HOME. is disconnected!

3 System Description

PROTECT HOME. is an uninterruptible power supply (UPS) for essential loads such as personal computers (PCs), satellite TV's, telecommunication equipment and similar devices. It consists of:

- Mains filter in the mains input incl. mains energy back feed protection
- Battery charger for charging the battery
- Battery as energy storage medium for bridging mains failures (for supplying the inverter)
- Inverter for the supply of connected loads with alternating voltage in case of power failure
- Switch device to switch the loads onto the inverter in case of power failure

The UPS is connected to a shockproof socket between the public utility's mains and the loads to be protected.

Under normal operating conditions, i.e. if PROTECT HOME. is supplied with mains voltage, the battery charger will ensure that the battery is always completely charged. In this case the connected loads are supplied via the line filter, with offers a effective protection against mains over voltage and mains voltage peaks.

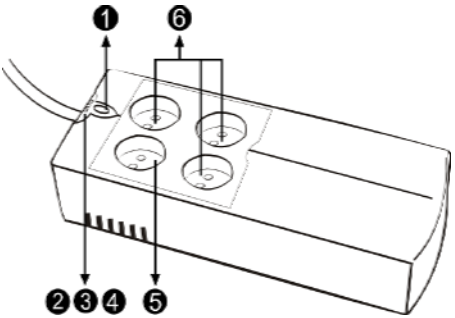
In the event of a mains failure PROTECT HOME. supplies voltage until the battery is discharged, allowing you to shut down your IT system properly and switch it off. The standby time mainly depends on the connected loads. If the mains power supply is back to normal values, the UPS will switch back the loads to mains supply. The battery charger will then recharge the battery.

For safety reasons (as required by German standards, VDE), the mains input in the unit will be disconnected by a two-pole switch in the event of a mains failure. Energy back feed to the mains and voltage supply to the pins of the mains connector are thus reliably avoided.

4 UPS overview

Connections, Operation / Display Elements:

Top view



❶ Power switch of the UPS (mains switch)

❷ Green LED:
Normal / power mode

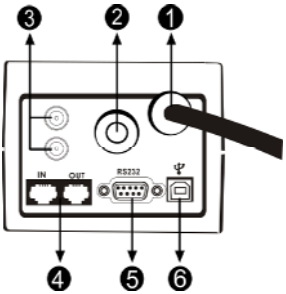
❸ Yellow LED:
Battery mode

❹ Red LED:
Warning / failure

❺ Surge protected only receptacles (without UPS protection)

❻ Battery power supplied receptacles (with UPS protection, e.g. power failure)

Side view



❶ Mains line for UPS with shockproof socket (230 Vac)

❷ Input circuit breaker (press button after possible execution = reset (RESET))

❸ Overload protection for SAT TV / SAT receiver, F-connector

❹ Overload protection telephone / fax / modem, RJ11 connector

❺ RS232 communication interface (Sub-D9)

❻ USB interface

4.1 Specifications

MODEL		PROTECT HOME.
Type power		600 VA / 300 W
UPS-input	Input voltage	230 Vac (1ph~ / N / PE)
	Input voltage range without battery mode	+ 6% / - 10%
	Frequency (auto selection)	50 / 60 Hz ± 5 Hz
	power consumption	3.0 A max.
UPS-output	Rated output voltage /AVR-technology	230 Vac
	Rated output voltage in battery mode	±10%
	Frequency in battery mode	50 / 60 Hz ± 1 Hz Default setting: 50 Hz
	Transfer time at mains outage	2 – 6 ms (typical)
	output power rate (at 230 Vac)	2.6 A
	Output Waveform	Approximately sine wave
Battery	Type	Sealed, maintenance-free (A-brand)
	Battery type / amount	1221 W / 1 battery
	back up time at nominal load / half load	~ 3 min. / ~ 8 min.
	deep discharge / overload protection	Yes
	Recharge time (to 90% of rated capacity)	8 h
Communication	Ports	USB and RS232 for status and measurement levels
	Shutdown software “Compuwatch”	For all popular operating systems (e.q. Windows, Linux, Mac) on CD
Protection		Overload and short circuit protection Surge protection for - Telephone, fax, modem (RJ11) - SAT-receiver (F-connector)
Indicator	AC mode	Green LED
	Backup mode	Yellow LED
	Fault	Red LED

Acoustic alarm	Backup mode	Sounding every 5 seconds
	Overload	Sounding every second
	Battery replacement	Sounding 2 times per seconds
	Fault UPS	Continuously sounding
General data	Size W x H x D	125 mm x 85 mm x 300 mm
	Weight	3.5 kg
	Operating temperature range	0° - 40°C
	Relative humidity	20% – 90 %
	Protection type	IP 20
	Audible noise (1 m distance)	< 40dB (A)
	Outlets	4 shockproof sockets (1 x with surge protection / 3 x additional UPS outlets)

Guidelines

The PROTECT HOME. complies with the product norm EN 50091.

The CE symbol on the unit certifies the compliance to the EG guidelines for 73/23 EEC low voltage and for 89/336 EEC electromagnetic compatibility (EMC), when following the installation instructions in the manual.

For the 73/23 EEC low voltage guidelines
Reference number EN 62040-1-1 : 2003

For 89/336-EMV guidelines
Reference number EN 50091-2 : 1995
EN 61000-3-2 : 1995
EN 61000-3-3 : 1995

Warning:

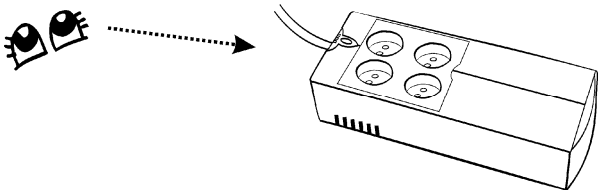
This is a class A – UPS product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take additional measures.

5 Set-Up and Operation

Installing the UPS is as easy as following the steps shown.

5.1 Inspection

Remove the UPS from its packaging and inspect it for damage that may have occurred during shipping. If any damage is discovered, repack the unit and return it to the place of purchase.



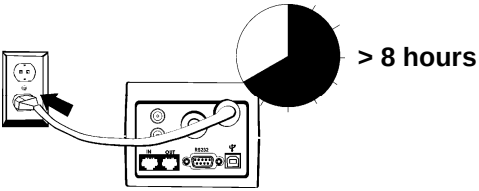
5.2 Placement

Install the UPS unit in any protected environment that provides adequate airflow around the unit which is free from excessive dust, corrosive fumes and conductive contaminants.

Do not use the UPS in environments with high temperatures or humidity.

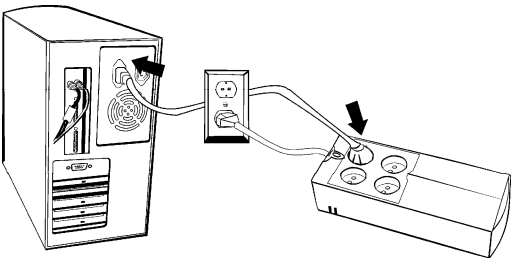
5.3 Charging

The PROTECT HOME is shipped from the factory with its internal battery fully charged, however, some power may be lost during shipping and the battery should be recharged prior to use. Plug the unit into an appropriate power supply and allow the UPS to charge fully by leaving it plugged in for at least 8 to 10 hours with no load (no electrical devices such as computers, monitors, etc.).



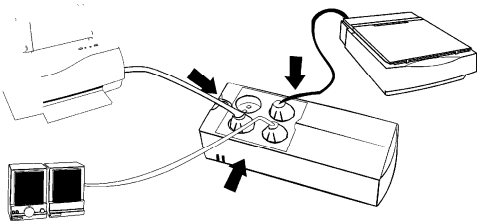
5.4 Computer connection

Connect one computer-related device into one of the battery supplied receptacles on the top of UPS. PROTECT HOME. provides four receptacles, three battery supplied receptacles and one surge protected only receptacles (marked “Battery Backup”).



5.5 Connection of peripheral devices

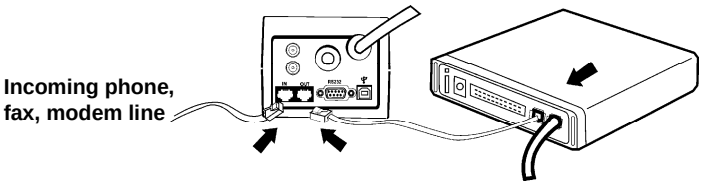
An additional outlet (marked “Surge Only”) with protection against over load (but without UPS protection) allows the supply of additional peripheral devices. Especially powerful loads should be connected here. Keep in mind that these receptacles do not provide any power during a power failure.



Do not plug heaters or other large electrical device with high power consumption into the UPS. The power demands of these devices will overload and can execute the input fuse of the PROTECT HOME.

5.6 Modem / Phoneline Connection

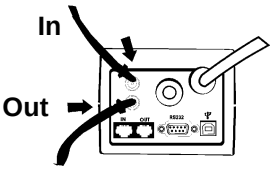
Plug incoming internet line into the “In” socket at the side panel of the PROTECT HOME.



Use one more internet line cable and plug one end of the internet line cable to the “Out” socket at the side panel of the UPS.

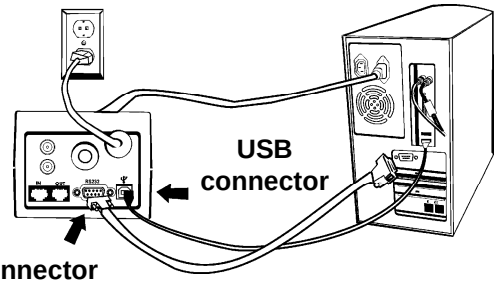
5.7 Satellite TV protection

Connect the incoming antenna line with the F connectors (optional via adapter plugs IEC) in the “IN” socket on the rear of your PROTECT HOME. Use the second antenna line and connect the “Out” socket with the Receiver, Decoder, TV, etc.



5.8 USB and serial cable (computer) connection

To allow for unattended system shutdown for your operating system, connect the USB or the RS232 serial cable (both part of the packing) as shown below. For the USB serial cable just simply plug into the UPS and PC.



The connection vie the USB connector will be auto detected.

5.9 Turn On/Off

To turn on the PROTECT HOME., press the on/off switch.

To turn off the PROTECT HOME., press the on/off switch again.

5.10 DC Start Function

The DC Start Function enables UPS to be started up when AC utility power is not available and battery is fully charged. Just simply press the power switch to turn on the UPS.

To protect yourself never switch on the main switch when the PROTECT HOME. is not connected to the mains.

5.11 Deep discharge protection

The UPS provides a deep discharge protection function. To protect the battery the deep discharge protection is activated before the battery is completely discharged.

5.12 Battery removal

Battery replacement should be performed by qualified service personnel.

Keep unauthorized persons away from the batteries!

Disconnect all power sources before battery replacement. Follow Fig. 1 below to remove the screws located on the bottom of the UPS to open the battery cover.

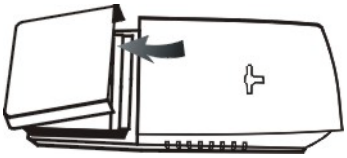


Fig. 1

After removing the battery cover, gently extract batteries from the case. Follow Fig. 2.

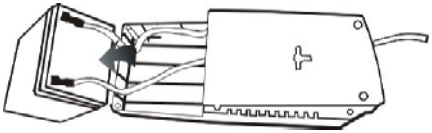


Fig. 2

Disconnect the two connecting wires from the batterie and replace with the same battery type (Fig. 3)

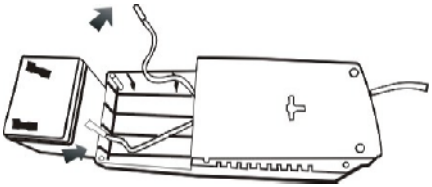
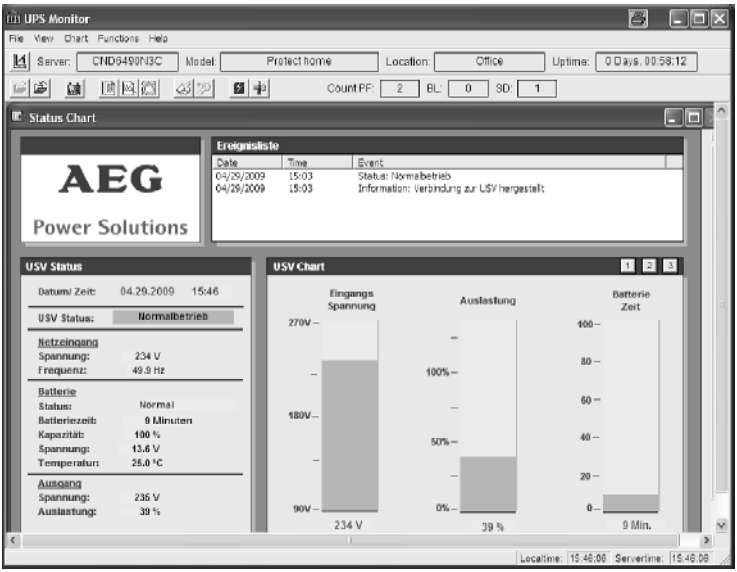


Fig. 3

Replace the batteries following the inverse sequence.
Take care to connect the “+” and “-“ poles correctly.

5.13 Shutdown- and UPS management software

The "CompuWatch" software specially developed for these purposes by AEG continuously checks the mains supply and the UPS status.



In conjunction with the "intelligent" UPS, this ensures that the availability of IT components and data security are guranteed.

The "CompuWatch" shutdown software supports different operating systems: Windows 98SE/ME, Windows NT/2000/ XP, Linux, Novell NetWare, IBM AIX, HP-UX, SUN Solaris, Mac OS X, and others.

Refer to the manual on the CD for details about installing the software on the various operating systems. Download updates via www.AEGpartnernet.com >> PRODUCTS >> Software >> CompuWatch.

6 Trouble shooting

Error	Cause	Remedy
Yellow LED is lighting, but audible alarm is heard intermittently.	UPS not connected properly to the mains.	Connect the UPS according to the installation guide.
UPS is functioning but audible alarm is heard periodically.	UPS overload.	Verify that the load matches the UPS capacity specified in the spec.
Communication lost between UPS and Computer.	Software not installed well.	Check the setting of the software.
	Cable is not properly connected.	Check if the RS232 or USB cable is firmly connected to the COM1/COM“ or USB of the computer and confirm the setting.
Red LED is lighting, alarm is heard continuously.	Hardware error in the UPS.	Contact dealer!

If any abnormal situations occur that are not listed above, please call the service centre immediately or contact our hotline (see page 4)

Guarantee certificate

Type: ……

Serial-no.: ……

Date of purchase: ……

Trading stamp / Signature

Specifications are subject to change without notice.

AEG

Power Solutions

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Emil-Siepmann-Straße 32
59581 Warstein-Belecke
Germany

Operating Instructions UPS
BAL 8000025758_01 EN